

**IN THE ABSTRACT:**

Delete lines 1 to 17, and insert:

**ABSTRACT OF THE DISCLOSURE**

A method of plasma etching, in particular of anisotropic plasma etching, of laterally defined structures in a silicon substrate, using a process gas, includes having at least one passivating material precipitated on the side walls of the laterally defined structures at least from time to time prior to and/or during etching. In an exemplary method, at least one of the compounds selected from the group  $\text{ClF}_3$ ,  $\text{BrF}_3$ , or  $\text{IF}_5$  is added to the process gas as a fluorine-delivering etching gas. In another exemplary method,  $\text{NF}_3$  is added to the process gas, at least from time to time, as an additive consuming the passivating material. Finally, in another exemplary method, a light and easily ionizable gas, in particular  $\text{H}_2$ ,  $\text{He}$ , or  $\text{Ne}$ , is added, at least from time to time, to the process gas. The three exemplary methods may be combined.

**IN THE CLAIMS:**

On the first page of the claims, first line, change "Patent Claims" to:

**--WHAT IS CLAIMED IS:--**

Please cancel original claims 1 to 18, without prejudice, and please add new claims 19 to 36 as follows:

19. (New) A method of anisotropic plasma etching a laterally defined structure in a silicon substrate using a process gas, the method comprising the steps of:

precipitating at least one passivating material at least on a side wall of the laterally defined structure at least from time to time at least one of prior to the anisotropic plasma etching and during the anisotropic plasma etching; and

adding a fluorine-delivering etching gas at least from time to time to the process gas, the fluorine-delivering etching gas including at least a compound selected from the group of  $\text{ClF}_3$ ,  $\text{BrF}_3$  and  $\text{IF}_5$ .

20. (New) The method of claim 19, further comprising the step of adding at least one gas selected from the group of  $\text{SiF}_4$ ,  $\text{C}_4\text{F}_5$ ,  $\text{C}_5\text{F}_6$ ,  $\text{C}_4\text{F}_{10}$ ,  $\text{C}_3\text{F}_8$  and  $\text{C}_2\text{F}_6$  to the process gas at least from time to time as a gas forming the at least one passivating material.